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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,709	10/07/2003	Christian Fleischhacker	48924-01170	2643

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EXAMINER

SINGH, RAMNANDAN P

ART UNIT	PAPER NUMBER
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2614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No. 10/680,709	Applicant(s) FLEISCHHACKER, CHRISTIAN	
Office Action Summary	Examiner Ramnandan Singh	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date (i) Jan. 26, 2004, (ii) <u>Jun 01, 2006, and (iii) Jun. 22, 2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy in German has been filed on March 16, 2006.

Drawings

2. The drawings are objected to because the legends explaining the reference numerals used in the figures 1 and 2 are not provided.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing

sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7-14, 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Vanderbauwhede et al [EP 1107464 A1].

Regarding claim 1, Vanderbauwhede et al disclose a bridge circuit

(13)

for echo suppression for a reception signal of a communication device (i.e. modem) connected to a transmission line, to which can be supplied firstly a transmission signal to be transmitted by the communication device via the transmission line and secondly the reception signal received via the transmission line, which reception signal has a transmission signal portion generated by the transmission signal shown in Fig. 1 [Para: 0017-0022], the bridge circuit comprising:

at least one bridge branch (19) [Fig. 2]; and

a variable simulation device (i.e. microprocessor 4) connected to the at least one bridge branch, the variable simulation device configured to simulate at least one circuit section of the at least one bridge branch and to balance the bridge circuit [Figs. 2-3; Para: 0025-0032];

wherein the bridge circuit is configured such that on balancing the bridge circuit, the reception signal can be tapped at the bridge circuit echo-suppressed with the transmission signal portion generated by the transmission signal being suppressed [Figs. 1-3; Para: 0037-0045].

Claim 9 is essentially similar to claim 1 and is rejected for the reasons stated above.

Regarding claim 2, Vanderbauwhede et al further disclose the bridge circuit, wherein at least part of the at least one bridge branch comprises an impedance of the transmission line (12A), an impedance of a transmitter to be connected to the transmission line (2), or an impedance of the communication device (1) [Figs. 1-2].

Claim 11 is essentially similar to claim 2 and is rejected for the reasons stated above.

Regarding claim 3, Vanderbauwhede et al further disclose the bridge circuit, wherein the simulation device (4) is configured and connected to the at least one bridge branch such that a lower level of the transmission signal is present therein than in the at least one bridge branch [Fig. 1].

Claim 12 is essentially similar to claim 3 and is rejected for the reasons stated above.

Regarding claim 4, Vanderbauwhede et al further disclose the bridge circuit, wherein the simulation device is connected in parallel to the at least one circuit section of the at least one bridge branch [Figs. 1, 3; claim 6].

Claim 13 is essentially similar to claim 4 and is rejected for the reasons stated above.

Regarding claim 5, Vanderbauwhede et al further disclose the bridge circuit, wherein the at least one bridge branch comprises at least one impedance to which is connected in parallel the simulation device to simulate this at least one impedance [Fig. 3].

Claim 14 is essentially similar to claim 5 and is rejected for the reasons stated above.

Regarding claim 7, Vanderbauwhede et al further disclose the bridge

circuit, wherein the simulation device is in the form of an integrated circuit
Para: 0019].

Claim 16 is essentially similar to claim 7 and is rejected for the
reasons stated above.

Regarding claim 8, Vanderbauwhede et al further disclose the bridge
circuit, wherein the simulation device is a microprocessor (4) which is
inherently a programmable to balance the bridge circuit [Para: 0019;
000025-0029].

Claim 17 is essentially similar to claim 8 and is rejected for the
reasons stated above.

Regarding claim 10, Vanderbauwhede et al further disclose the
communication device, wherein the device is configured for transmission
and reception of xDSL signals [Fig. 1; Para: 0017; 0053].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderbauwhede et al as applied to claims 1 and 9 above.

Regarding claim 6, although Vanderbauwhede et al teach balancing the bridge and thereby computing Zb impedance [Figs. 2-3; Para: 0049], it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to use any specific value of the impedance of the simulating device in order to balance the bridge depending subject to circuit, system, and design constraints.

Claim 15 is essentially similar to claim 6 and is rejected for the reasons stated above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hikuma et al [US 5,893,034] teach improving sidetone handling in a telephone set [Whole document].

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh
Examiner
Art Unit 2614

A handwritten signature in black ink, appearing to read 'RNS', with a long horizontal flourish underneath.